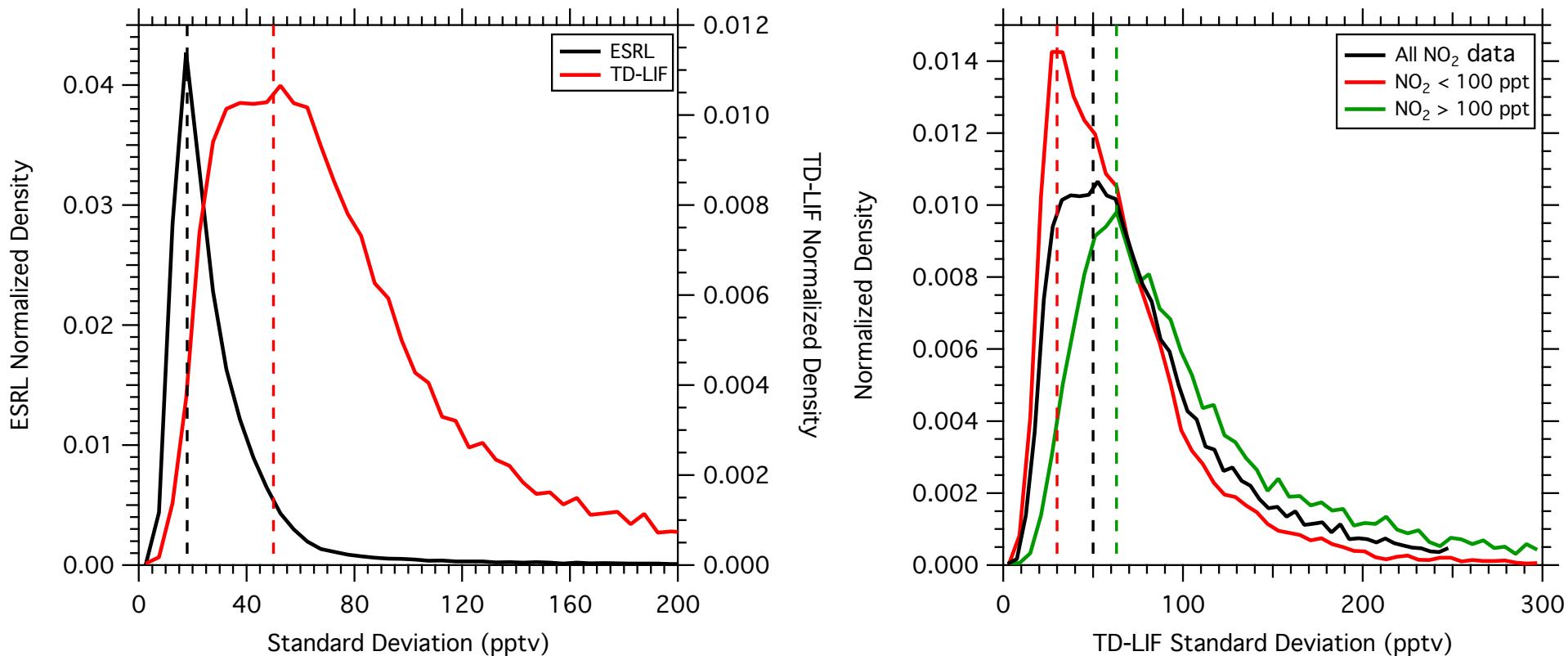


Precision



- TD-LIF 1s precision is less than 50 pptv
- ESRL 1s precision is about 20 pptv
- The right hand figure demonstrates that at higher NO₂ levels the standard deviation is influenced by ambient variability at the 10 second time interval.

Data:

- 1 second TD-LIF: SEAC4RS-TDLIF-NO2_DC8_#####_R0.ict (##### = daily files from 20130806 – 20130923).
- 1 second ESRL: SEAC4RS-NO2_DC8_#####_R1.ict (##### = daily files from 20130806 – 20130923).

Precision for 1 second data:

- Standard deviations were calculated for 5, 10, and 20 seconds.
- Only bins containing at least 70% of data used in the analysis.
- Precisions are estimated at less than 50 pptv for TD-LIF, and 20 pptv for ESRL.